MINUTES OF MEETING

of the

BOARD OF DIRECTORS

Monday, June 19, 1989

at

Sawgrass Country Club, Ponte Vedra, Florida

DIRECTORS PRESENT

Robert E. Nelson	Abex Corporation Friction Products Group
Arthur V. Moore	Carlisle Corporation Motion Control Industries
Larry Mintman	Certified Brakes Allied Signal, Inc.
Larry Belans	Friction Material Company, Inc.
Ron Randall	HKM of California, Corp.
Rita Grisham	Nuturn Corporation
F. William Barton	Reddaway Manufacturing Co.

OTHERS PRESENT

W. Max Sleeth, President	HKM of California, Corp.
Richard LeBlancq, Counsel	Harwood Lloyd, Attorneys at Law
Edward W. Drislane, Secretary	Friction Material Standards Institute
Gilbert N. Laycock, Secretary	Friction Material Standards Institute
William F. Wood (Chairman, Brake Performance Study Committee)	Carlisle Corporation Motion Control Industries
Douglas A. Willsie (Chairman, Data Book & Technical Committee)	Aimco Division ITT Industries of Canada

Mr. Sleeth, President, called the meeting to order at 8:35 AM.

MINUTES OF PREVIOUS MEETING

The minutes of the previous meeting of the Board of Directors held April 5, 1989 had been distributed. It was suggested that the Secretary dispense with the reading of the minutes. Upon motion duly made, seconded and unanimously approved, it was:

> RESOLVED: To accept the minutes of the meeting of the Board of Directors of April 5, 1989 as written.

PRESIDENT'S REPORT

Mr. Sleeth, President, delivered his report. Please refer to EXHIBIT 1 in the report booklet.

Mr. Sleeth noted the most significant thing to happen in his first year as President was the retirement of Mr. Drislane and the ensuing search for a replacement. He expressed thanks to the Technical Committee Chairmen for the work of those committees during the year. Mr. Sleeth commended Mr. Drislane on his "usual excellent performance in the management of the Institute", and welcomed Mr. Gil Laycock as the new Secretary.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the President's Report as written.

The next item on the agenda was the introduction of Gil Laycock. Since the Directors had met Gil at the previous nights reception and were familiar with his qualifications, this item was passed over.

MEMBERSHIP COMMITTEE

Ms. Rita Grisham, Chairman of the Membership Committee, presented this report. Please refer to EXHIBIT 2 in the report booklet.

Ms. Grisham noted that the Active Members remained unchanged at 22, but significant changes occurred in the Regional Membership from 29 to 34 with Licensees increasing from 20 to 22. The report detailed the changes.

After the report was prepar d, there were two applications received at the Institute Office for Regional Membership. The first was an application from Fox Friction Manufacturing, Inc. of Mississauga, Ontario, Canada. This application had been reviewed by the Membership Committee which recommended its acceptance. Copies of the Fox Friction application were distributed to the Board of Directors. Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the application for Regional Membership filed by Fox Friction Manufacturing, Inc. of Mississauga, Ontario, Canada.

The second application was from Fibro Friction Inc. of Montreal, Quebec, Canada. This application had also been reviewed by the Membership Committee, which had recommended its acceptance. Copies of the Fibro Friction application were distributed to the Board of Directors. Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the application for Regional Membership filed by Fibro Friction Inc. of Montreal, Quebec, Canada.

Both will have their membership effective July 1, 1989.

A Director asked about Total Brake Industries of Dorval, Quebec, Canada concerning their apparent acquisition of the former Virginia Friction Plant in

Walkerton, Virginia. They are making lining and pucks in the Walkerton plant. The basic question is whether they are a Canadian manufacturer with a U.S. subsidiary, or a U.S. manufacturer with a Canadian subsidiary. If Canadian - they would remain as a Regional Member, with two categories. If U.S., they would be an Active Member, with two categories. There would be no difference in the fee structure. The only difference would be eligibility to serve on the Board if they were a U.S. company.

Regarding delinquent fees, the only member with billing outstanding of more than six months was ARTAZCOZ, S.A.I.C. of Argentina. They had been advised by the Secretary that services were suspended and would be reviewed by the Board of Directors at the Annual Meeting for possible termination. On Thursday, June 15th their check was received via Federal Express bringing their account balance to zero.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the Membership Committee Report as written.

TREASURER'S REPORT

Mr. Larry Belans, Treasurer, read this report. Please refer to EXHIBIT 3 in the report booklet.

The report projected an excess of income over expenses of about $6,700. There were some variances from budget, both favorable and unfavorable. But the two items that impacted the Balance Sheet most favorably were the reversal of the Reserve for Environmental Affairs taking $29,200 into income and a substantial net from the sale of Catalogs of almost $12,000. Both of these items combined to offset the added expense of two Director's salaries, plus associated expense for 5 months.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the Treasurer's Report as written.

INVESTMENT ADVISORY COMMITTEE REPORT

Mr. Art Moore, Chairman, read the Investment Advisory Committee report. Please refer to EXHIBIT 4 in the report booklet.

Mr. Moore advised that total investment assets at June 30, 1989 were projected at about $264,000 versus $290,000 at June 30, 1988. The reduction was primarily brought about by the extra Director salary from February to June and associated costs. Interest receivables were down due to maturing of our higher interest Treasury Notes.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the report of the Investment Advisory Committee as written.

BUDGET COMMITTEE

Mr. Larry Belans, Chairman, presented the Budget Committee Report. Please refer to EXHIBIT 5 in the report booklet.

The Committee proposed an Expense Budget of $151,040 for the 1989-90 fiscal year. This is less than a 4% increase over the expense budget for the year now ending. Although the total budget figure is comparable to the previous year, there are major changes in certain items - eg. salaries decreased by $8,000, rent increased by $12,800 (Unless a Sub-lease arrangement can be made in Paramus). Pension Expense decreased by $7,800. Other items showed less significant variations, most of which were associated with the change in personnel and office move.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the Budget Committee Report.

FEE FORMULA COMMITTEE REPORT

Mr. R. E. Nelson, Chairman of the Fee Formula Committee, presented his committee's report. Please refer to EXHIBIT 6 in the report booklet.

Mr. Nelson noted that the formula for billing was restructed in 1987 and reviewed the structure for all of the types of membership. The income projection combined with Investment Income projected to within $1,000 of the proposed budget.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the Fee Formula Committee Report as written.

It was noted that, since the Fee Formula Committee Report was written and Income Projections made, two new membership applications had been received and were approved earlier in the meeting giving additional income of $3,700.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: It is the Board of Directors recommendation to the membership that the Fee Formula for fiscal year 1989-90 remain unchanged.

MOVE OF OFFICE FROM NEW JERSEY TO CONNECTICUT

The discussion items on the agenda were: Time frame to move, rental of space in Connecticut, and Sub-lease of Paramus. Mr. Drislane commented that although these items are related, they cannot be tied too firmly to each other. It would be better to establish a firm date for the move and work to that date. With respect to length of lease, there was some discussion and it was generally agreed that the lease should be no more than 5 years in length.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: The move of the Institute Office from Paramus to Connecticut should take place on or about September 1, 1989, and the lease should be no more than 5 years in length.

Mr. LeBlancq noted that when negotiating the lease we should attempt to get an option to renew at a set rate.

Mr. Drislane suggested that the Board of Directors should authorize Gil Laycock to handle the negotiation for the Sub-lease of Paramus and the acquisition of office space in Connecticut.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: The Board of Directors authorize Gil Laycock to negotiate for FMSI with respect to the Sub-lease of the Paramus Office and the acquisition of office space in Connecticut.

PERSONAL COMPUTER AUTHORIZATION

The Board of Directors in 1985 had originally approved an authorization of up to $5,000 for an IBM Personal Computer/Word Processor which has not been purchased. Gil Laycock advised that the Printer we have used for the last Catalog and Supplement has computer typesetting which uses the language called ASCII. IBM equipment does not use ASCII. Although conversions are possible, they are not without problems. The intent is to have a PC which will use the same language as the Printer and be able to put the Catalog and/or Supplement on discs, send the discs to the Printer, and feed directly to his computer. Additionally, there are many PC's on the market which will do the same work as an IBM, but are less expensive.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To authorize the expenditure of up to $5,000 for a personal Computer and peripherals without specification as to make or model.

DATA BOOK AND TECHNICAL COMMITTEE REPORT

Mr. Doug Willsie, Chairman, presented this report. Please refer to EXHIBIT 8 in the report booklet.

Mr. Willsie noted changes in the roster of the Committee during the past year. Mr. Barry Swears of Abex was replaced by Mr. Jerry Shupe, and Gil Laycock had left to become Secretary of FMSI. The Committee met on May 3, 1989 and several resolutions and decisions were made.

- Gil Laycock to replace Ed Drislane on the ad-hoc Committee that decides if a material is organic or semi-metallic.

- o Data Book color rotation - Blue/Red/Green, etc.
- o Substituting "I-M" for "Integrally Molded", and line condensation to save pages in Catalog.
- o Continue to assign new "D" numbers to small changes in steel, but show a sketch with changes noted in text rather than another sketch.
- o Address hardware changes in disc assemblies by notation to "See Illustrations".
- o Commence gathering information on heavy-duty brake shoes and make number assignments where application information is available.
- o Draft preliminary system of FMSI numbers for motorcycle disc pads.
- o Rescind resolution made March 28, 1984 calling for disc brake pads to be shown in Brake Block Identification Catalog.
- o All brake shoes starting with 611 will have "S" Prefix because of the potential confusion with disc pucks when shoes reach 700.
- o Use the same lining assignment for new disc assemblies that are up to .020" less in thickness than the existing otherwise identical assignments.
- o Show total thickness on disc assemblies that have lining molded on both sides.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the report of the Data Book and Technical Committee as written.

A general discussion followed which concerned the support of the Institute with technical information. For all types of friction material; drum brake linings, disc brake linings, clutch facings, and brake blocks. One Board member stated that if a manufacturer was making a part as original equipment, it was not necessary to submit a detailed drawing to make an assignment. A sketch of the part with nominal dimensions (No tolerances) and basic application information is sufficient. Import car disc brake assignments are made from sample parts with hand traced drawings and crudely measured dimensions. One Board member recalled that over the years we have repeatedly requested the support of the membership, yet it seems to be falling off. It was noted that clutch facing assignments could be made with a general sketch consisting of O.D., I.D. thickness, number of holes, drill circle, hole spacing, drill size, counterbore size, through hole size and general application information. It was recommended that this subject be brought up at the membership meeting.

BRAKE PERFORMANCE STUDY COMMITTEE REPORT

Mr. Bill Wood, Chairman, delivered the Brake Performance Study Committee Report. Please refer to EXHIBIT 7 in the report booklet.

One meeting of the Brake Performance Study Committee was held during the past year and dedicated to producing a draft proposal for Marking Procedure J1801. Copies of the proposal and cover letter with supporting statements were included in the Report Booklet. Copies of the proposal and supporting statements have been forwarded to Mr. Randall Patresh of Bendix, and Mr. James R. Clark of Eaton, who are working on the SAE J1801/1802 Procedures.

A Director commented that when organizations outside the friction industry propose or endorse requirements that the industry must live with, it can become very expensive for the industry.

NHTSA (National Highway and Traffic Safety Administration) has just acknowledged receipt of the original SAE J1801/1802 Procedures and are studying them. A Director commented that it is a positive step that FMSI as a representative of the industry, is presencing input from the manufacturers. It was generally agreed that the original slotting precedure for J1801 would not provide that much value to the end user when the procedures get down to the final draft. A rational statement is included with the proposal and NHTSA must evaluate the cost impact of any rule making. It was felt that the Institute should approach the block manufacturers with a request to get a cost estimate of both the slotting and embossing methods of permanently marking blocks. This information in condensed and consolidated form could become part of the rational statement.

Mr. Wood advised that SAE had asked if FMSI would be interested to act as a repository for block identification and coding when a format of what type of information to be retained is established. At the Brake Performance Study Committee meeting it was agreed that the Institute would be interested in submitting a bid to be a repository for the coding information for SAE J1801.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the Brake Performance Study Committee Report as written.

HEALTH AND ENVIRONMENTAL AFFAIRS COMMITTEE

Ms. Rita Grisham, Chairman, delivered this report. Please refer to EXHIBIT 9 in the report booklet.

The Chairman's report was submitted as a summation of significant events during the past year.

EPA Ban Proposal - In April 1988 the new support case from the agency was made available for public comment. FMSI as a body, did not comment (since comment had been made in 1986). However, member companies did submit comment and other interested groups. During September and October 1988, EPA advised industry that they intended to publish a Final Regulation before January 20, 1989. The draft of Final Regulation was submitted to the Office of Management and Budget on December 16, 1988. To date, six months have passed and OMB continues to assess and evaluate the draft regulation. The regulators are anticipating a "summer release".

NESHAPS (National Emissions Standard for Hazardous Air Pollutants) - proposed rulemaking for the asbestos NESHAPS had been issued. It deals with control devices, fugitive emissions monitoring, record keeping and reporting for asbestos manufacturing and fabricating operations. It is expected that the rule will be issued in about a year.

OSHA 29CFR, Part 1910.1000 Air Contaminants - Subpart Z - on January 19, 1989 issued final rules and regulations for "hundreds" of "Air Contaminants". Overall, 413 substances are listed (163 for the first time and 91 have new limits which are generally lower than the old ones).

Internationally, Ms. Grisham, noted existing rules in Austria, Denmark, Germany, Norway, and Sweden. She also noted that in Japan a product is considered asbestos feee if it contains no more than 5% asbestos.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the Health and Environmental Affairs Committee Report as written.

ANNUAL MEETING COMMITTEE REPORT

Mr. Stanley Stokes, Chairman, prepared this report. Please refer to EXHIBIT 12 in the report booklet.

The Committee had obtained video tapes of Hyatt Lake Tahoe and Indian River Plantation in Stuart, Florida. Both of the videos were viewed (courtesy of VCR and TV provided by Bill Barton). Additionally, Williamsburg, VA was discussed. The Committee recommended that next years meeting be held at Hyatt Lake Tahoe. It was agreed that the vote on where the meeting will be held would be by the new Board of Directors. This vote would take place at the Directors Meeting which follows the first half of the membership meeting.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the Annual Meeting Committee Report as written.

HISTORICAL SALES REPORTING

The Secretary reported on the Historical Sales Program for the past year. Please refer to EXHIBIT 11 in the report booklet.

The period covered was calendar year 1988. A listing showing who reported for the four quarters of the year is part of the report. There were more "Ins and Outs" than in previous years, with three members reporting for the first time. They were Duramax, Interfriction and Total Brake Industries. The report noted that Regional Members exporting to the United States have been asked to participate.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the report on Historical Sales Reporting as written.

INSTITUTE PENSION PLANS

The Secretary reported on the Institute Pension Plans. Please refer to EXHIBIT 10 in the report booklet.

There are two plans: (1) the Simplified Employee Pension Plan (SEP) for current employees, and (2) the Trust established for Harriet G. Duschek which was funded by an Institute contribution of $35,000 in 1980.

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The SEP calls for 15% of eligible employee salaries to be contributed to an employee's IRA. The Duschek Trust pays Miss Duschek $550 monthly, with assets as of December 31, 1988 of $46,309.

Upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To accept the report on Institute Pension Plans as written.

At this point Mr. Drislane was excused from the meeting.

Mr. Sleeth discussed the Plaque which was recommended by Art Moore, and put together by he and Ron Randall. Additionally, a bonus for Mr. Drislane was discussed which had also been discussed at the April 5th meeting of the Board, and the general agreement that Ed and Betty K. be invited back to next years meeting at Institute expense.

Upon motions duly made, seconded and unanimously passed, it was:

RESOLVED: To authorize the Secretary to pay approximately $400 from Institute funds for the Plaque.

RESOLVED: To authorize the Secretary to draw a check payable to Edward W. Drislane in the amount of $4,500 Net from Institute funds. The Institute to absorb the FICA, withholding and SEP contributions.

RESOLVED: To invite Ed and Betty K. Drislane to next years annual meeting at Institute expense.

There being no other business brought to the attention of the Board of Directors, and upon motion duly made, seconded and unanimously passed, it was:

RESOLVED: To adjourn.

Adjourned at 11:50 AM.

G. N. Laycock
Secretary